

Comparisons of Job Characteristics

Focus Occupation: [Engineering Technicians, Except Drafters, All Other \(17-3029\)](#)

Associated Occupation: [Industrial Engineers \(17-2112\)](#)

[Compare Knowledge](#)

[Compare Skills](#)

[Compare Abilities](#)

[Compare Detailed Work Activities](#)

[Compare Tools and Technologies](#)

<<	Focus occupation element is much lower
<	Focus occupation element is lower
0	Focus occupation element is at a similar level
>	Focus occupation element is at a higher level
>>	Focus occupation element is at a much higher level

Knowledge

Similarity of Focus Occupation to Associated Occupation: 92

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation: Industrial Engineers (17-2112)

Associated Occupation's Key Knowledge Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Engineering and Technology	5.7	18.0	17.6	0 Current knowledge level may be sufficient
Production and Processing	6.0	17.4	13.3	<< Extensive education and/or training may be required
Mathematics	9.2	15.6	16.6	0 Current knowledge level may be sufficient
Mechanical	6.8	15.6	16.6	0 Current knowledge level may be sufficient
Design	5.2	14.8	15.1	0 Current knowledge level may be sufficient

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Skills

Similarity of Focus Occupation to Associated Occupation: 46

Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029)

Associated Occupation: Industrial Engineers (17-2112)

Associated Occupation's Key Skills Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation
Reading Comprehension	10.7	14.8	12.3	< A higher skill level may be required
Complex Problem Solving	9.1	12.8	11.3	< A higher skill level may be required
Writing	9.2	12.8	9.7	<< Extensive development of skills in this area may be required
Monitoring	9.9	12.2	11.4	0 Current skill level may be sufficient
Mathematics	6.2	10.3	10.8	0 Current skill level may be sufficient
Systems Analysis	6.5	9.9	9.5	0 Current skill level may be sufficient
Systems Evaluation	6.4	9.5	8.5	< A higher skill level may be required
Management of Material Resources	3.7	7.2	5.5	< A higher skill level may be required

Management of Financial Resources	3.3	6.0	4.5	<<	Extensive development of skills in this area may be required
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The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

Abilities		Similarity of Focus Occupation to Associated Occupation: 92			
Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Industrial Engineers (17-2112)					
Associated Occupation's Key Abilities Elements	Average Rating, All Occupations	Associated Occupation's Rating	Focus Occupation's Rating	Evaluation of Focus Occupation	
Written Comprehension	11.0	14.6	12.7	<	Some improvement in abilities may be required
Written Expression	9.8	14.1	11.2	<	Some improvement in abilities may be required
Problem Sensitivity	11.1	13.6	12.6	0	Current ability level may be sufficient
Inductive Reasoning	10.2	12.8	12.0	0	Current ability level may be sufficient
Information Ordering	9.9	11.8	12.0	0	Current ability level may be sufficient
Selective Attention	8.7	10.7	10.3	0	Current ability level may be sufficient
Mathematical Reasoning	6.3	10.5	11.2	0	Current ability level may be sufficient
Visualization	7.5	10.3	12.3	>	Current ability level is likely sufficient
Time Sharing	6.6	8.5	7.6	<	Some improvement in abilities may be required

The maximum possible rating is 25.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.

There are no common work activities.

Tools and Technologies that Both Occupations Have in Common		Similarity of Focus Occupation to Associated Occupation: 77
Focus Occupation: Engineering Technicians, Except Drafters, All Other (17-3029) Associated Occupation: Industrial Engineers (17-2112)		
Tools and Technologies	Exclusivity	
Business function specific software	1	
Computer printers	2	
Computers	1	
Content authoring and editing software	1	
Conveyors and accessories	18	
Development software	4	
Electrical measuring and testing equipment	7	
Hydraulic presses	25	
Indicating and recording instruments	2	
Industry specific software	1	
Integrated circuits	18	

Laboratory environmental conditioning equipment	24
Laboratory furniture	90
Laboratory ovens and accessories	15
Length and thickness and distance measuring instruments	2
Light and wave generating and measuring equipment	4
Metals and metallurgy and structural materials testing instruments	15
Pressure measuring and control instruments	10
Sound generating and measuring equipment	19
Temperature and heat measuring instruments	6
Transducers	23
Viewing and observing instruments and accessories	4

Not all positions in these occupations will necessarily use all of the listed tools and technologies. The exclusivity rating is an indication of how unique the tool or technology is amongst all occupations. The maximum rating is 100. High scores indicate that only a small number of occupations use that tool or technology.

Source: Alaska Department of Labor and Workforce Development, Research and Analysis Section analysis of O*NET (Occupation Information Network) data.